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# Agricultural Exports by Cooperatives, 1980



# Abstract

**Agricultural Exports By Cooperatives, 1980.** Tracey L. Kennedy, Agricultural Cooperative Service, U.S. Department of Agriculture, ACS Research Report 26.

Sixty-three agricultural cooperatives had direct exports of \$3.2 billion in calendar year 1980. Grains and preparations had the largest dollar volume of direct exports, followed by oilseeds, cotton, and fruits. Cooperative share of U.S. agricultural exports decreased from 9.2 percent in 1976 to 7.8 percent in 1980. Asian and European countries were the largest markets for direct exports by cooperatives in 1980.

**Key words:** Agricultural exports, cooperative exports, cooperative export marketing, direct commodities exports, indirect commodities exports.

# Preface

Little information describing the performance of direct exporting cooperatives has been gathered on a regular, industrywide basis. This report is based on a survey of direct exporting cooperatives for calendar year 1980. The objective is to describe the role of cooperative exporters by measuring cooperative involvement in the international market in terms of number of exporters, dollar volumes of exports in 1980, commodities handled, and destinations.

Farmer Cooperative Service, now Agricultural Cooperative Service, conducted the first survey of cooperative exporting in 1970 and an update in 1976. These two reports are not directly comparable, but they represent the only attempts until now to measure cooperative participation in international trade for all commodities.

The format and data of this report basically are comparable with that of the 1976 report. However, as these data are stated in dollar volumes, valid comparisons cannot be made without adjustments for inflation. For the purpose of this report, changes over the period can be described sufficiently using market shares and other percentages. The sections dealing with payment and delivery terms, transportation, and marketing channels are not included in this report. Methodology is described in Appendix A. Except where noted, the terms "direct exports," "direct exporters," and "direct sales" refer to direct exporting cooperatives.

# Highlights

In 1980, 63 cooperatives had direct exports valued at \$3.22 billion, compared with 73 cooperatives with exports of \$2.3 billion in 1976. Exports are classified as direct or indirect according to the degree to which a cooperative uses its own personnel and facilities to make an export sale.

Thirty-four of the 63 direct exporters also had indirect sales of \$3.1 billion for total exports of \$6.3 billion in 1980. Many other cooperatives sell their commodities for export indirectly, but difficulty in determining exact values and final destinations makes it impractical to measure. Only export sales (direct and indirect) from direct exporting cooperatives are included in this report.

Grains were the most important commodity in terms of dollar volume, with direct exports from 14 cooperatives valued at \$1.3 billion. Oilseed exports from nine cooperatives were valued at \$617 million, and four associations had cotton exports of \$514 million. The largest number of cooperatives exporting from any commodity group was 22 fruit cooperatives with direct exports valued at \$408 million. Nuts and preparations valued at \$203 million came from 4 associations, animal products exports of \$97 million from 7, and vegetable exports worth \$25 million from 10. Specialty-type commodities and byproducts such as honey, wine, field and garden seed, cotton linters, and beet and citrus pulp had a combined export value of \$31 million and originated from eight cooperatives.

Direct exports by cooperatives accounted for 7.8 percent of all U.S. agricultural exports in 1980, down from 9.2 percent in 1976. Several commodity groups had even larger shares of U.S. exports. Nuts and preparations by cooperatives represented 35 percent of total U.S. nut exports. Cooperative fruit exports accounted for 30 percent of the U.S. total, while 18 percent of all U.S. cotton exports were made by cooperatives. All other commodity groups had somewhat smaller shares. Grain and oilseed exports represented about 7 percent each of U.S. exports of those commodities. Vegetable cooperatives exported only about 2 percent of U.S. vegetable exports. The diversity of products included in the group, "other commodities," does not allow meaningful comparison.

Cooperatives reported more than 90 country destinations for their direct exports in 1980. Asian destinations accounted for about 50 percent of shipments. More than half went to Japan, the rest mostly to Southeast and West Asia. About 28 percent had a final destination in Europe, principally in European Economic Community (EEC) countries. Canada received 6.8 percent; combined Latin American countries, 4.8 percent; and the Soviet Union, 2.6 percent.



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# Agricultural Exports By Cooperatives, 1980<sup>[1-2]</sup>

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Agricultural exports are a mainstay of the farm sector and national economies. Producers derive more than a fifth of their income from exports, and more than a third of all cultivated cropland is committed to production of commodities for export. Agricultural exports are important in terms of their contribution to the U.S. trade balance. In 1980, the agricultural trade sector contributed a surplus of \$23 billion to a trade balance deficit increasingly dominated by petroleum import expenditures.

Cooperatives have a natural interest in exporting. As efficient assemblers, handlers, and marketers of commodities domestically, the next logical step in returning a larger share of the marketing margin to their farmer-owners is exporting.

To compete in an international market historically dominated by larger multinational firms, cooperatives have had to extend their expertise to include the full range of export marketing functions, from procurement, processing, and transportation, to the highly interrelated functions of sales, market information, financing, and documentation, as well as risk management and regulation.<sup>1</sup>

<sup>1</sup>Mark D. Newman and Harold N. Riley, *Coordination Opportunities for Farmer Cooperatives in Export Marketing*, USDA/ACS, 1982.

## DEFINITION OF TERMS

Several terms require definition. Though the terms, export sale, direct export, and indirect export are fairly common, variations in definitions among users require use of some uniform method of classification.

### Identifying Export Sales

The term, export sale, for our purposes, includes all shipments to foreign destinations *except* those to:

- U.S. armed forces or U.S. diplomatic missions abroad, for their use;
- U.S. territorial possessions, Guam, Puerto Rico, and the Virgin Islands; and
- Vessels and planes engaged in international commerce for use as supplies.

The degree to which a cooperative employs its own personnel and facilities in arranging and completing an export sale determines whether it is classified as a direct or indirect exporter. In general, to be classified a direct exporter, a cooperative must use its own personnel or employ foreign-based representatives to sell directly to foreign buyers or their foreign-based agents. The cooperative is the primary decision-maker regarding performance of functions necessary to complete the sale. Alternatively, an indirect exporter sells to or through an intermediary who handles the necessary sales arrangements.

Because of the variety of meanings attached to "direct" and "indirect," these terms were not used on the questionnaire. Instead, respondents were asked to determine whether export sales were made through "this cooperative" (direct) or through "another company" (indirect) according to the following criteria<sup>2</sup>:

### Direct Exports

Sales are made *through*:

- *U.S. export brokers*, U.S. firms that establish contact between buyer and seller;
- *Cooperatives' foreign sales representatives or agents*, foreign firms representing sellers in foreign countries; and
- *Foreign import brokers or agents*, foreign firms representing buyers in foreign countries.

Sales are made *to*:

- *Foreign distributors*, foreign firms purchasing finished products for resale to other foreign firms;
- *Foreign retailers or associations of retailers*, foreign firms purchasing finished products to resell through their own outlets;

<sup>2</sup>Donald E. Hirsch, *Agricultural Exports by Cooperatives*, U.S. Department of Agriculture, Agricultural Cooperative Service, 1979.

- *Foreign end-users*, foreign firms purchasing raw products to process and resell to other foreign firms or their own retail outlets;

- *Japanese trading companies*, if the commodity was delivered by the seller to a U.S. or foreign port and was destined for Japan; and

- *Foreign government purchasing offices or their agents*, the latter being foreign firms.

### Indirect exports

Sales are made *through*:

- *U.S. export agents*, U.S. firms that put sellers in touch with buyers and act as export sales agents for the sellers.

- *U.S. export management companies*, U.S. firms having the authority and capability to act as sellers' export sales departments; and

- *U.S. export commission agents*, U.S. firms that represent foreign buyers (commercial or government) in arranging for purchase of commodities.

Sales are made *to*:

- *U.S. export merchants*, U.S. firms other than international grain trading companies that buy commodities for resale to foreign firms;

- *International grain trading companies*, large companies buying and selling grain in the United States and other countries;

- *Foreign government purchasing agents in the United States*, foreign controlled, but usually operating like U.S. export commission agents because they are stationed in this country; and

- *Japanese trading companies*, if the commodity was *not* delivered by the seller to a U.S. or foreign port and/or was not destined for Japan.

Because many cooperatives do not know the final destinations of indirect sales, no practical way is possible to measure accurately total export sales by all cooperatives. Therefore, indirect

Figure 1

### Location of Direct Exporting Cooperatives



Table 1—Size distribution for direct exporting cooperatives based on dollar volumes, 1980

| Value of direct exports |     | Cooperatives      |                     |
|-------------------------|-----|-------------------|---------------------|
| Million dollars         | No. | Pct. of Total no. | Pct. of Total value |
| 0 - 0.99.....           | 18  | 29                | 1                   |
| 1 - 9.9.....            | 17  | 27                | 2                   |
| 10 - 19.9.....          | 10  | 16                | 5                   |
| 20 - 39.9.....          | 5   | 10                | 5                   |
| 40 - 59.9.....          | 1   | 2                 | 2                   |
| 60 - 79.9.....          | 1   | 2                 | 2                   |
| 80 - 99.9.....          | 1   | 2                 | 3                   |
| 100+ .....              | 10  | 14                | 82                  |
| Total .....             | 63  | <sup>1</sup> 100  | <sup>1</sup> 100    |

<sup>1</sup>Does not add due to rounding.

exports have been counted only when made by cooperatives that also export directly. This method provides a description of total export activity by direct exporters, the focus of this report.

## COOPERATIVE PARTICIPATION IN EXPORTING, 1980

In 1980, 63 cooperatives were engaged in direct exporting of agricultural commodities. The diversity of this group, in terms of size, location, and commodities handled, illustrates the extent of participation in exporting across the entire cooperative community.

### Size and location

The cooperatives identified as direct exporters were headquartered in 23 States (fig. 1). The location of a cooperative in a particular State does not necessarily reflect its importance in terms of dollar value of commodities contributed for export, as supply areas often reach beyond State boundaries.

More than half of the 63 exporters were in California, Texas, Washington, Florida, and Michigan and handled a wide variety of commodities from fruits and vegetables to grains, oilseeds, and cotton.

In terms of dollar volumes of direct exports, the cooperatives ranged in size from less than \$100,000 in direct exports to more than \$900 million (table 1). Direct exports were highly concentrated among a few firms in 1980, as shown in the table. The 10 largest cooperatives, with export sales ranging from \$110 million to almost \$1 billion, were responsible for 82 percent of the total dollar volume of direct sales. Conversely, the 35 cooperatives (more than half the total) with export sales of less than \$10 million each, accounted for a little more than 2 percent of the total dollar volume.

### Export Values

In 1980, 63 cooperatives had direct exports valued at \$3.22 billion (table 2, fig. 2). Thirty-four of these cooperatives also had indirect export sales of \$3.14 billion, for total exports by direct exporting cooperatives of \$6.3 billion.

Figure 2

## Values of Direct Exports by Cooperatives and Percent of Total Direct Exports, 1980

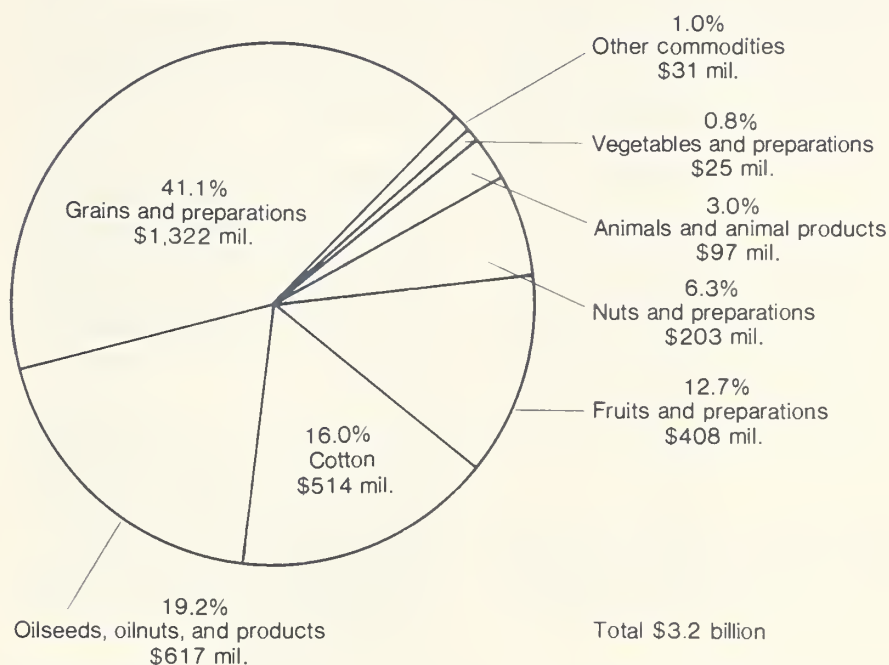


Table 2—Value of direct exports by cooperatives, by commodity group, 1980

| Commodity group <sup>1</sup>                 | Direct Exports |                    |
|--|----------------|--------------------|
|  | 1,000 dol.     | Pct. of total      |
| Animals and animal products <sup>2</sup>     | 97,139         | 3.0                |
| Grains and preparations                      | 1,322,837      | 41.1               |
| Oilseeds, oilnuts, and products <sup>3</sup> | 617,614        | 19.2               |
| Fruits and preparations                      | 408,257        | 12.7               |
| Vegetables and preparations                  | 25,658         | 0.8                |
| Nuts and preparations                        | 203,150        | 6.3                |
| Cotton (raw) <sup>4</sup>                    | 514,570        | 16.0               |
| Other commodities <sup>5</sup>               | 31,228         | 1.0                |
| Total  | 3,220,453      | <sup>6</sup> 100.0 |

<sup>1</sup>Excluding tobacco.

<sup>2</sup>Excluding furskins.

<sup>3</sup>Including peanuts.

<sup>4</sup>Excluding linters.

<sup>5</sup>Includes cotton linters, honey, field and garden seed, essential oils, citrus pulp, beet pulp, and wine.

<sup>6</sup>Does not add due to rounding.



Exports of grains and grain preparations by 14 cooperatives were valued at \$1.3 billion, accounting for about 41 percent of total direct exports. Oilseed exports from nine cooperatives accounted for the second largest dollar volume at \$617 million, or 19.2 percent of the total. Following were raw cotton exports from four cooperatives valued at \$514 million, or 16.0 percent, and fruits and fruit preparation exports of \$408 million, representing 12.7 percent.

The 22 fruit exporters were the largest group of direct exporters. Four nut cooperatives had exports of \$203 million, while 10 vegetable cooperatives had exports of \$25 million. Byproducts and specialty products not otherwise categorized, including honey, wine, seed, pulp, and cotton linters, were exported by eight cooperatives and valued at \$31 million.

More than 60 percent of the value of all direct exports consisted of grain and oilseeds. The four largest commodity groups, grains, oilseeds, cotton, and fruits, represent almost 90 percent of all direct exports.

Thirty-four of the 63 direct exporters had a combined dollar volume of indirect exports comparable to that of direct sales at \$3.14 billion (table 3).

Grain had the greatest dollar volume, with indirect sales of \$2.2 billion. Indirect oilseed sales amounted to \$739 million, followed by cotton with sales of \$86 million.

Apparently, cooperatives, particularly grain and oilseed associations, depend heavily on indirect sales, because more than half of all grains and oilseeds direct exporting cooperatives actually handled was sold indirectly. Relatively small amounts of products from all other commodity groups were sold indirectly.

Overall, direct and indirect grain sales accounted for 57 percent of the total value of commodities moved into export marketing channels by direct exporting cooperatives. Oilseeds accounted for 21 percent of the total. Combined, grain and oilseed exports accounted for 78 percent of total cooperative exports.

## Export Shares

Direct exports by cooperatives accounted for 7.8 percent of total U.S. agricultural exports in 1980 (table 4 and fig. 3). Cooperatives had relatively large shares of several individual commodity groups. Exports of nuts and nut preparations valued at \$203 million represent more than 35 percent of all U.S. nut exports. These exports originated from only four associations. Fruit exports from 22 cooperatives had a 30-percent share of U.S. fruit shipments. The large shares of these commodities suggest the importance to cooperatives of exports of branded, processed products.

Cotton had the largest share of U.S. exports, 17.9 percent among bulk, homogeneous commodities. Grains had a 7-percent share of U.S. grain exports, and oilseeds had a 6.6-percent share.

Direct exports of animals and animal products accounted for 2.9 percent of U.S. exports of those commodities, followed by vegetables with a 2.2-percent share.

**Table 3—Values of direct, indirect, and total exports of direct exporting cooperatives by commodity group, 1980**

| Commodity group <sup>1</sup>                       | Direct exports  |            | Indirect exports |            | Total exports |            |
|--|-----------------|------------|------------------|------------|---------------|------------|
|  | Cooperatives    | Value      | Cooperatives     | Value      | Cooperatives  | Value      |
|  | Number          | 1,000 dol. | Number           | 1,000 dol. | Number        | 1,000 dol. |
| Animals and animal products <sup>2</sup> .....     | 7               | 97,139     | 3                | 13,970     | 7             | 111,109    |
| Grains and preparations .....                      | 14              | 1,322,837  | 10               | 2,281,133  | 14            | 3,603,970  |
| Oilseeds, oilnuts, and products <sup>3</sup> ..... | 9               | 617,614    | 6                | 739,884    | 9             | 1,357,498  |
| Fruit and preparations .....                       | 22              | 408,257    | 7                | 14,723     | 22            | 422,980    |
| Vegetables and preparations.....                   | 10              | 25,658     | 4                | 3,146      | 10            | 28,804     |
| Nuts and preparations .....                        | 4               | 203,150    | 1                | 6,462      | 4             | 209,612    |
| Cotton (raw) <sup>4</sup> .....                    | 4               | 514,570    | 2                | 86,633     | 4             | 601,203    |
| Other commodities <sup>5</sup> .....               | 8               | 31,228     | 1                | 329        | 7             | 31,557     |
| Total.....   | <sup>6</sup> 63 | 3,220,453  | <sup>7</sup> 34  | 3,146,280  | 63            | 6,366,733  |

<sup>1</sup>Excluding tobacco.

<sup>2</sup>Excluding furskins.

<sup>3</sup>Including peanuts.

<sup>4</sup>Excluding linters.

<sup>5</sup>Includes cotton linters, honey, wine, field and garden seed, essential oils, citrus pulp, and beet pulp.

<sup>6</sup>Some cooperatives had exports from more than 1 commodity group.

<sup>7</sup>Thirty-four of the 63 direct exporting cooperatives had indirect as well as direct exports.

Total direct and indirect exports by direct exporting cooperatives were valued at \$6.3 billion, more than 15 percent of all U.S. agricultural exports. This means at some point in the marketing channel, cooperatives handle at least 15 percent of all U.S. commodities bound for export. This fact indicates a greater involvement by cooperatives in international trade than implied by figures for direct exporting only.

The figures using total exports cannot be called cooperative shares of U.S. exports accurately, as the indirect values are likely to contain some duplication from cooperative-to-cooperative sales. In addition, exports by cooperatives that sell only indirectly are not included. Apparently, though, cooperatives have a larger role in the export market than indicated by direct export values alone.

**Table 4—Cooperative export share of total U.S. agricultural exports by commodity group, based on direct cooperative exports, 1980**

| Commodity group <sup>1</sup>                           | U.S. agricultural exports | Value of co-op exports | Co-op share of U.S. exports |
|--|---------------------------|------------------------|-----------------------------|
|  | 1,000 dol.                | 1,000 dol.             | Pct. of total U.S.          |
| Animals and animal products <sup>2</sup> .....         | 3,296,114                 | 97,139                 | 2.9                         |
| Grains and preparations .....                          | 18,884,829                | 1,322,837              | 7.0                         |
| Oilseeds, oilnuts, and preparations <sup>3</sup> ..... | 9,342,385                 | 617,614                | 6.6                         |
| Fruits and preparations .....                          | 1,335,020                 | 408,257                | 30.6                        |
| Vegetables and preparations .....                      | 1,187,812                 | 25,658                 | 2.2                         |
| Nuts and preparations .....                            | 578,367                   | 203,150                | 35.1                        |
| Cotton (raw) <sup>4</sup> .....                        | 2,880,134                 | 514,570                | 17.9                        |
| Other commodities <sup>5</sup> .....                   | 3,751,273                 | 31,228                 | —                           |
| Totals .....   | 41,255,934                | 3,220,453              | 7.8                         |

<sup>1</sup>Excluding tobacco.

<sup>4</sup>Excluding linters.

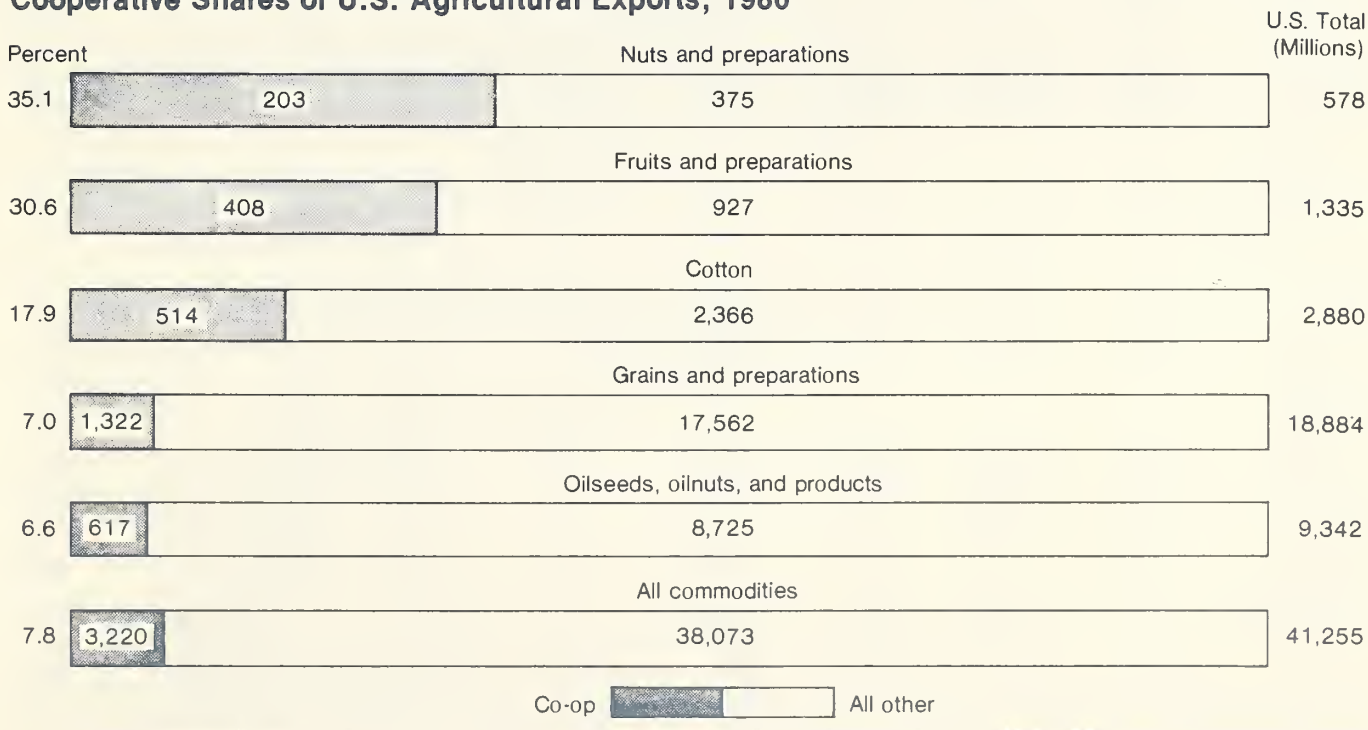
<sup>2</sup>Excluding furskins.

<sup>5</sup>Includes cotton linters, honey, wine, field and garden seed, essential oils, citrus pulp, and beet pulp.

<sup>3</sup>Including peanuts.

Figure 3

### Cooperative Shares of U.S. Agricultural Exports, 1980



## Destinations of Cooperative Exports

Cooperatives reported 90 countries as destinations for direct exports in 1980 (table 5 and fig. 4). About \$1.57 billion or 49 percent of all direct exports had destinations in Asia. The largest markets within this region were Japan, Southeast and East Asia, and West Asia with \$884 million, \$491 million, and \$199 million, respectively. Japan was the largest individual market overall, with about 27 percent of total direct exports.

Europe was the second largest regional market for direct exports at \$882 million or 27 percent of the total. EEC countries received the bulk of this, at \$621 million, followed by all other Western European countries with \$181 million and Eastern Europe, excluding the Soviet Union, with \$79 million.

Canada appears to be the third largest market receiving cooperative exports valued at \$215 million. However, a significant proportion of these exports likely had final destinations in Europe.

The total for Latin American countries purchasing commodities directly from U.S. cooperatives was \$142 million, with South American countries and Mexico the primary markets.

The Soviet Union imported only \$81 million worth of cooperative commodities, about 2 percent of the total.

As expected from the distribution of total exports, the largest values for individual commodity groups are distributed relatively evenly between Europe

**Table 5—Cooperative exports (direct) by destination and commodity group, 1980**

| Destination            | Animals <sup>1</sup><br>and animal<br>products | Grains<br>and<br>preparations | Oilseeds,<br>oilnuts, and<br>products | Fruits<br>and<br>preparations | Vegetables<br>and<br>preparations | Nuts<br>and<br>preparations | Cotton<br>(raw) | Other<br>commodities | Total            |
|------------------------|--|-------------------------------|---------------------------------------|-------------------------------|-----------------------------------|-----------------------------|-----------------|----------------------|------------------|
| <i>1,000 dollars</i>   |  |                               |                                       |                               |                                   |                             |                 |                      |                  |
| Canada                 | 35,882   | 52,756                        | 63,289                                | 53,573                        | 1,971                             | 7,578                       | 51              | 102                  | 215,202          |
| Latin America          | 2,302  | 96,128                        | 17,652                                | 17,494                        | 6,583                             | 1,588                       | 115             | 387                  | 142,249          |
| Mexico                 | 100  | 35,080                        | 4,793                                 | 534                           | 6,142                             | 676                         | 0               | 165                  | 47,490           |
| Central America        | 35   | 11                            | 1,470                                 | 1,993                         | 408                               | 6                           | 0               | 0                    | 3,923            |
| Caribbean              | 1,443  | 345                           | 0                                     | 9,174                         | 32                                | 12                          | 0               | 17                   | 11,023           |
| South America          | 724  | 60,692                        | 11,389                                | 5,793                         | 1                                 | 894                         | 115             | 205                  | 79,813           |
| Europe                 | 10,181   | 248,159                       | 239,130                               | 154,806                       | 11,155                            | 144,186                     | 67,361          | 7,280                | 882,258          |
| EEC                    | 9,196  | 132,795                       | 183,799                               | 139,452                       | 10,527                            | 116,208                     | 23,230          | 6,355                | 621,562          |
| Other                  |  |                               |                                       |                               |                                   |                             |                 |                      |                  |
| Western Europe         | 981  | 81,667                        | 39,143                                | 11,403                        | 482                               | 26,988                      | 20,437          | 125                  | 181,226          |
| Eastern Europe         | 4  | 33,697                        | 16,188                                | 3,951                         | 146                               | 990                         | 23,694          | 800                  | 79,470           |
| U.S.S.R.               | 0  | 79,461                        | 0                                     | 0                             | 0                                 | 2,446                       | 0               | 0                    | 81,907           |
| Asia                   | 46,551   | 732,216                       | 155,776                               | 144,425                       | 5,641                             | 33,349                      | 446,968         | 12,074               | 1,577,000        |
| West Asia              | 16,014   | 156,033                       | 450                                   | 6,089                         | 131                               | 5,082                       | 15,450          | 237                  | 199,486          |
| South Asia             | 0  | 0                             | 0                                     | 0                             | 0                                 | 1,077                       | 1,268           | 0                    | 2,345            |
| SE & E Asia            | 2,194  | 185,628                       | 18,686                                | 8,358                         | 93                                | 1,432                       | 274,769         | 0                    | 491,160          |
| Japan                  | 28,343   | 390,555                       | 136,640                               | 129,978                       | 5,417                             | 25,758                      | 155,481         | 11,837               | 884,009          |
| Africa                 | 332  | 3,656                         | 0                                     | 30                            | 0                                 | 1,548                       | 0               | 0                    | 5,566            |
| Oceania                | 64   | 461                           | 1,121                                 | 552                           | 298                               | 2,414                       | 75              | 0                    | 4,985            |
| Unknown/<br>unreported | 1,827  | 110,000                       | 140,646                               | 37,377                        | 10                                | 10,041                      | 0               | 11,385               | 311,286          |
| <b>Total</b>           | <b>97,139</b>                                  | <b>1,322,837</b>              | <b>617,614</b>                        | <b>408,257</b>                | <b>25,658</b>                     | <b>203,150</b>              | <b>514,570</b>  | <b>31,228</b>        | <b>3,220,453</b> |

<sup>1</sup>Excluding furskins.



and Asia. Europe imported the largest values of oilseeds, fruits, vegetables, and nuts, while Asia led in grains, cotton, and other commodities. Canada was the leading individual importer of animals and animal products at \$35 million.

## COMMODITY REVIEWS, 1980

This section provides more specific information on the eight major commodity groups. Each group has been divided, where possible, into relevant subgroups.

### Animals and Animal Products

**Values and Shares** Animals and animal products ranked sixth in total dollar value of direct exports in 1980 with \$97 million. In addition to direct exports, a number of direct exporters also had indirect sales of \$13 million, for a total of \$111 million (table 6a).

Red meats and poultry products had the largest value of direct exports with \$60 million. Poultry products alone accounted for more than \$24 million, and exports of live animals and other products were valued at more than \$36 million.

Meats and poultry products, worth \$13 million, were the only indirect exports by direct exporters.

Direct exports of animal products by cooperatives accounted for about 3 percent of U.S. animal and product shipments (table 6b).

Meat products had the largest share, with 4.2 percent of U.S. animal exports. Live animals and other products accounted for about 2 percent each of its total.

**Destinations** Asia imported the largest dollar volume of animal products, \$46 million (table 6c). The bulk of this was \$28 million worth of meats to Japan

and \$15 million in meat products to West Asia.

Canada was the largest single-country market, spending \$35 million, mostly for live animals. In fact, Canada was the only market for live animals from cooperatives in 1980, probably due to the proximity of the market and lower transportation costs.

Europe bought \$10 million worth of animal products, mostly meats and products going to EEC countries.

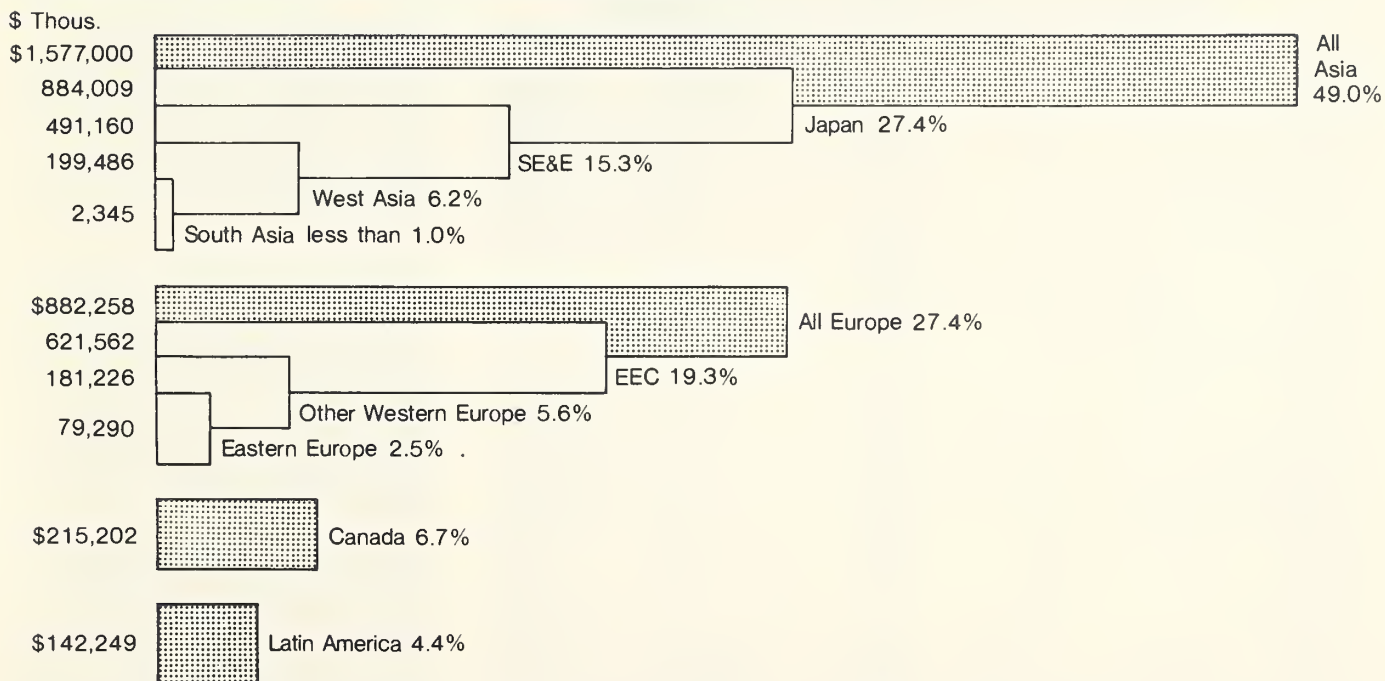
Two million dollars' worth of animal exports, mostly meats to the Caribbean, went to Latin America.

### Grains and Preparations

**Values and Shares** Grain was the largest commodity group in 1980, with direct sales of \$1.32 billion from 14 cooperatives (table 7a). In addition, nine of those associations had indirect sales of \$2.2 billion, more than 60

Figure 4

### Cooperative Exports (Direct) by Destination, 1980





**Table 6a—Animals and animal products, values of direct, indirect, and total exports by cooperatives, 1980**

| Commodity                                     | Direct         |            | Indirect         |            | Total  |                      |
|---|----------------|------------|------------------|------------|--------|----------------------|
|   | Co-ops         | Value      | Co-ops           | Value      | Co-ops | Value                |
|   | No.            | 1,000 dol. | No.              | 1,000 dol. | No.    | 1,000 dol.           |
| Red meats and poultry products .....          | 5              | 60,666     | ( <sup>1</sup> ) | 13,970     | 5      | 74,636               |
| Other, mainly live animals <sup>2</sup> ..... | 4              | 36,473     | ( <sup>1</sup> ) | —          | 4      | 36,473               |
| Total .....                                   | <sup>3</sup> 7 | 97,139     | ( <sup>1</sup> ) | 13,970     | 7      | <sup>2</sup> 111,109 |

<sup>1</sup>Three or fewer cooperatives.

<sup>2</sup>Includes dairy products, hides and skins (excluding furskins), and live animals.

<sup>3</sup>Some cooperatives export more than 1 of the commodities listed.

**Table 6b—Cooperative shares of U.S. exports of animals and animal products, 1980.**

| Commodity   | U.S. exports | Direct cooperative exports | Cooperative share of U.S. exports |
|---|--------------|----------------------------|-----------------------------------|
|   | 1,000 dol.   | 1,000 dol.                 | Percent                           |
| Meats and preparations, including poultry meats ..... | 1,444,575    | 60,666                     | 4.2                               |
| Other, mainly live animals <sup>1</sup> .....         | 1,751,539    | 36,473                     | 2.1                               |
| Total .....   | 3,196,114    | 97,139                     | 2.9                               |

<sup>1</sup>Includes dairy products, hides, and skins (excluding furskins), fats, oils, and greases.

**Table 6c—Animals and animal products, direct exports by destination, 1980**

| Destination                | Meats and products including poultry | Others, mainly live animals <sup>1</sup> | Total  |
|----------------------------|--------------------------------------|--|--------|
|                            | 1,000 dollars                        |  |        |
| Canada .....               | 0                                    | 35,882                                   | 35,882 |
| Latin America .....        | 2,060                                | 242                                      | 2,302  |
| Mexico .....               | 0                                    | 100                                      | 100    |
| Central America .....      | 0                                    | 35                                       | 35     |
| Caribbean .....            | 1,371                                | 72                                       | 1,443  |
| South America .....        | 689                                  | 35                                       | 724    |
| Europe .....               | 10,047                               | 134                                      | 10,181 |
| EEC .....                  | 9,196                                | 0  | 9,196  |
| Other Western Europe ..... | 851                                  | 130                                      | 981    |
| Eastern Europe .....       | 0                                    | 4  | 4      |
| U.S.S.R. ....              | 0                                    | 0  | 0      |
| Asia .....                 | 46,436                               | 115                                      | 46,551 |
| West Asia .....            | 15,942                               | 72                                       | 16,014 |
| South Asia .....           | 0                                    | 0  | 0      |
| SE & East Asia .....       | 2,186                                | 8  | 2,194  |
| Japan .....                | 28,308                               | 35                                       | 28,343 |
| Africa .....               | 232                                  | 100                                      | 332    |
| Oceania .....              | 64                                   | 0  | 64     |
| Unknown .....              | 1,827                                | 0  | 1,827  |
| Total .....                | 60,666                               | 36,473                                   | 97,139 |

<sup>1</sup>Includes dairy products, hides and skins (excluding furskins), fats, oils, and greases.

percent of total grain shipments by direct exporting cooperatives.

Feedgrains, mainly corn, had the largest dollar volume of direct exports at \$674 million. In addition, indirect feedgrain exports amounted to \$981 million, for a total by direct exporters of \$1.65 billion.

Rice exports were the second largest in terms of direct sales, with \$363 million from five cooperatives. Indirect rice exports amounted to \$152 million.

Wheat exports, while having the smallest value of direct sales at \$284 million from five cooperatives, also had the largest indirect sales at \$1.14 billion. Thus, direct exporting cooperatives exported 80 percent of their wheat indirectly.

Cooperative share of U.S. grain exports was 7 percent (table 7b). Direct exports of rice from five cooperatives had the largest share at 28 percent. Feedgrains from cooperatives accounted for 6 percent of all U.S. feedgrain exports. Cooperatives direct exported only 4.5 percent of all U.S. wheat.

**Destinations** Asia was the largest market for cooperative grain exports, with shipments valued at \$732 million (table 7c). The bulk of these exports was composed of feedgrains to Japan (\$327 million) and rice exports to West Asia (\$124 million) and Southeast and East Asia (\$109 million).

Europe was the second largest buyer of cooperative grains, with purchases of \$248 million. The largest portion of this was feedgrains valued at \$116 million to EEC nations and \$51 million to the other countries of Western Europe. Of the \$48 million in wheat shipments, \$22 million went to non-EEC countries, including \$16 million to Eastern Europe.

Latin American destinations received \$96 million in grains, with \$60 million in wheat to South America and \$30 million to Mexico.

The Soviet Union imported \$64 million in feedgrains and \$14 million in wheat

for a total of \$79 million. Cooperatives exported grains worth \$52 million to Canada, most of which was feedgrains.

### Oilseeds, Oilnuts, and Products

**Values and Shares** Oilseeds, oilnuts, and products from nine cooperatives ranked second in total dollar value of direct exports in 1980 at \$617 million (table 8a). Six of the nine associations also had indirect sales of \$739 million for total exports by direct exporters of \$1.35 billion.

Soybeans made up the bulk of oilseed exports both directly (\$394 million) and indirectly (\$598 million).

Cake, oil, and, meal accounted for \$179 million in direct exports and \$129 million in indirect exports.

Direct exports of peanuts and other types of oilseeds such as cottonseed and sunflowerseed amounted to \$43 million, with indirect sales at \$11 million.

Direct cooperative oilseed exports of \$617 million accounted for 6.6 percent of U.S. oilseed shipments. Cooperative shares are shown in table 8b.

Individually, exports of peanuts and other oilseeds of \$43 million held the largest share, at 8.3 percent.

Soybeans valued at \$394 million accounted for 6.7 percent of U.S. soybean exports, followed by cake, meal, and oil shipments of \$179 million at 6.1 percent.

Cooperatives were responsible for less than 1 percent of U.S. exports of other oilseeds such as cottonseed, flaxseed, and sunflowerseed.

**Destinations** Europe was the largest market for cooperative oilseeds with purchases of \$239 million (table 8c). The bulk of this consisted of soybeans and various other types of oilseeds including peanuts to the EEC.

Asia was the second largest regional market, with oilseed purchases of \$155 million. Japan was responsible for most of this, with \$100 million of soybeans

**Table 7a—Grains and preparations, values of direct, indirect, and total exports by cooperatives, 1980**

| Commodity                     | Direct          |            | Indirect       |            | Total  |            |
|-------------------------------|-----------------|------------|----------------|------------|--------|------------|
|                               | Co-ops          | Value      | Co-ops         | Value      | Co-ops | Value      |
|                               | No.             | 1,000 dol. | No.            | 1,000 dol. | No.    | 1,000 dol. |
| Wheat .....                   | 5               | 284,658    | 5              | 1,147,831  | 5      | 1,432,489  |
| Rice.....                     | 5               | 363,456    | 3              | 152,285    | 5      | 515,741    |
| Feedgrains <sup>1</sup> ..... | 7               | 674,723    | 6              | 981,017    | 7      | 1,655,740  |
| Total.....                    | <sup>2</sup> 14 | 1,322,837  | <sup>2</sup> 9 | 2,281,133  | 14     | 3,603,970  |

<sup>1</sup>Includes corn, sorghum, barley, prepared feeds, and other feedgrains.

<sup>2</sup>Some cooperatives had exports from more than 1 commodity listed.

**Table 7b—Grains and preparations, cooperative shares of U.S. exports, 1980**

| Commodity   | U.S. exports | Direct cooperative exports | Cooperative share of U.S. exports |
|-------------|--------------|----------------------------|-----------------------------------|
|             | 1,000 dol.   | 1,000 dol.                 | Percent                           |
| Wheat.....  | 6,374,561    | 284,658                    | 4.5                               |
| Rice .....  | 1,288,540    | 363,456                    | 28.2                              |
| Feedgrains  | 11,221,728   | 674,723                    | 6.0                               |
| Total ..... | 18,884,829   | 1,322,837                  | 7.0                               |

<sup>1</sup>Includes corn, sorghum, barley prepared feeds, and other feedgrains, and byproducts.

**Table 7c—Grains and preparations, direct exports by destination, 1980**

| Destination                | Wheat         | Rice    | Feedgrains <sup>1</sup> | Total     |
|----------------------------|---------------|---------|-------------------------|-----------|
|                            | 1,000 dollars |         |                         |           |
| Canada.....                | 0             | 3,617   | 49,139                  | 52,756    |
| Latin America.....         | 91,262        | 356     | 4,510                   | 96,128    |
| Mexico .....               | 30,570        | 0       | 4,510                   | 35,080    |
| Central America .....      | 0             | 11      | 0                       | 11        |
| Caribbean.....             | 0             | 345     | 0                       | 345       |
| South America.....         | 60,692        | 0       | 0                       | 60,692    |
| Europe.....                | 48,042        | 14,551  | 185,566                 | 248,159   |
| EEC .....                  | 8,996         | 7,355   | 116,444                 | 132,795   |
| Other Western Europe ..... | 22,702        | 7,196   | 51,769                  | 81,667    |
| Eastern Europe .....       | 16,344        | 0       | 17,353                  | 33,697    |
| U.S.S.R.....               | 14,566        | 0       | 64,895                  | 79,461    |
| Asia.....                  | 127,492       | 234,161 | 370,563                 | 732,216   |
| West Asia .....            | 22,357        | 124,295 | 9,381                   | 156,033   |
| South Asia.....            | 0             | 0       | 0                       | 0         |
| SE & E Asia.....           | 41,747        | 109,866 | 34,015                  | 185,628   |
| Japan .....                | 63,388        | 0       | 327,167                 | 390,555   |
| Africa.....                | 3,296         | 310     | 50                      | 3,656     |
| Oceania.....               | 0             | 461     | 0                       | 461       |
| Unknown.....               | 0             | 110,000 | 0                       | 110,000   |
| Total .....                | 284,658       | 363,456 | 674,723                 | 1,322,837 |

<sup>1</sup>Includes corn, sorghum, barley, prepared feeds, and other feedgrains.

**Table 8a—Oilseeds, oilnuts, and preparations, values of direct, indirect, and total exports by cooperatives, 1980**

| Commodity                                     | Direct         |            | Indirect         |            | Total            |            |
|---|----------------|------------|------------------|------------|------------------|------------|
|   | Co-ops         | Value      | Co-ops           | Value      | Co-ops           | Value      |
|   | No.            | 1,000 dol. | No.              | 1,000 dol. | No.              | 1,000 dol. |
| Soybeans .....                                | 3              | 394,882    | 3                | 598,983    | 3                | 993,865    |
| Peanuts and other oilseeds <sup>1</sup> ..... | 4              | 43,240     | ( <sup>2</sup> ) | 11,100     | 4                | 54,340     |
| Cake and meal, oils .....                     | 3              | 179,492    | ( <sup>2</sup> ) | 129,801    | ( <sup>2</sup> ) | 309,293    |
| Total .....                                   | <sup>3</sup> 9 | 617,614    | 6                | 739,884    | 9                | 1,357,498  |

<sup>1</sup>Includes sunflowerseed, cottonseed, and flaxseed.

<sup>2</sup>Three or fewer cooperatives.

<sup>3</sup>Some cooperatives had exports from more than 1 commodity group.

**Table 8b—Oilseeds, oilnuts, and products, cooperative shares of U.S. exports, 1980**

| Commodity                                     | U.S. exports | Direct cooperative exports | Cooperative share of U.S. exports |
|---|--------------|----------------------------|-----------------------------------|
|   | 1,000 dol.   | 1,000 dol.                 | Percent                           |
| Soybeans .....                                | 5,879,942    | 394,882                    | 6.7                               |
| Peanuts and other oilseeds <sup>1</sup> ..... | 519,850      | 43,240                     | 8.3                               |
| Cake, meal and oils .....                     | 2,942,593    | 179,492                    | 6.1                               |
| Total .....                                   | 9,342,385    | 617,614                    | 6.6                               |

<sup>1</sup>Includes sunflowerseed, cottonseed, and flaxseed.

**Table 8c—Oilseeds, oilnuts, and products, direct exports by destination, 1980**

| Destination              | Soybeans   | Peanuts and other oilseeds <sup>1</sup> | Cake, meal, and oil | Total   |
|--------------------------|------------|---|---------------------|---------|
|                          | 1,000 dol. |   |                     |         |
| Canada .....             | 51,086     | 12,203                                  | 0                   | 63,289  |
| Latin America .....      | 0          | 5,444                                   | 12,208              | 17,652  |
| Mexico .....             | 0          | 4,793                                   | 0                   | 4,793   |
| Central America .....    | 0          | 634                                     | 836                 | 1,470   |
| Caribbean .....          | 0          | 0                                       | 0                   | 0       |
| South America .....      | 0          | 17                                      | 11,372              | 11,389  |
| Europe .....             | 224,428    | 14,702                                  | 0                   | 239,130 |
| EEC .....                | 169,565    | 14,234                                  | 0                   | 183,799 |
| Other W. Europe .....    | 38,675     | 468                                     | 0                   | 39,143  |
| Eastern Europe .....     | 16,188     | 0                                       | 0                   | 16,188  |
| U.S.S.R. ....            | 0          | 0                                       | 0                   | 0       |
| Asia .....               | 119,368    | 5,134                                   | 31,274              | 155,776 |
| West Asia .....          | 0          | 0                                       | 450                 | 450     |
| South Asia .....         | 0          | 0                                       | 0                   | 0       |
| SE & E Asia .....        | 18,686     | 0                                       | 0                   | 18,686  |
| Japan .....              | 100,682    | 5,134                                   | 30,824              | 136,640 |
| Africa .....             | 0          | 0                                       | 0                   | 0       |
| Oceania .....            | 0          | 111                                     | 1,010               | 1,121   |
| Unknown/unreported ..... | 0          | 5,646                                   | 135,000             | 140,646 |
| Total .....              | 394,882    | 43,240                                  | 179,492             | 617,614 |

<sup>1</sup>Includes sunflowerseed, cottonseed, and flaxseed.

and \$30 million in cake, meal, and oil purchases.

Canada received \$63 million in oilseeds, mainly soybeans.

### Fruits and Preparations

**Values and Shares** Twenty-two cooperatives had direct exports of fruit and fruit preparations valued at \$408 million in 1980 (table 9a). Nine of these associations also had indirect sales of \$14 million.

The largest category of fruit exports was citrus valued at \$210 million. Fresh citrus accounted for more than \$193 million of this. Exports of processed fruit other than citrus amounted to \$149 million. Fresh fruit other than citrus accounted for \$48 million in direct exports.

Cooperatives were responsible for 30.6 percent of all U.S. exports of fruits and fruit products (table 9b).

Overall, cooperatives appear to have a healthy presence in the fruit export market. Citrus and citrus product exports accounted for more than 38 percent of all U.S. citrus exports. Exports of fresh citrus alone represented more than half of all U.S. shipments of fresh citrus.

Processed fruits other than citrus, with direct sales of \$149 million, had a 34.5-percent share. Fresh fruit sales other than citrus by direct exporters accounted for 13.4 percent of U.S. exports.

**Destinations** Europe and Asia were the principal markets for fruit and fruit products, each receiving a little more than 35 percent of the total (table 9c). Within these regions, Japan purchased \$129 million worth of fruit and fruit products, primarily citrus. EEC nations imported cooperative fruit valued at \$139 million, consisting mainly of processed fruit other than citrus, and citrus products.

Most of the \$53 million in exports to Canada was made up of citrus. Latin American destinations received \$17 million in fruit, with the Caribbean the major market area.



**Table 9a—Fruits and preparations, values of direct, indirect, and total exports, 1980**

| Commodity                        | Direct          |            | Indirect         |            | Total           |            |
|----------------------------------|-----------------|------------|------------------|------------|-----------------|------------|
|                                  | Co-ops          | Value      | Co-ops           | Value      | Co-ops          | Value      |
|                                  | No.             | 1,000 dol. | No.              | 1,000 dol. | No.             | 1,000 dol. |
| All citrus <sup>1</sup> .....    | 8               | 210,236    | ( <sup>2</sup> ) | 7,310      | 8               | 217,546    |
| Fresh fruit noncitrus.....       | 7               | 48,270     | ( <sup>2</sup> ) | 4,664      | 7               | 52,934     |
| Processed fruit, noncitrus ..... | 11              | 149,751    | 4                | 2,749      | 11              | 152,500    |
| Total.....                       | <sup>3</sup> 22 | 408,257    | <sup>3</sup> 9   | 14,723     | <sup>3</sup> 22 | 422,980    |

<sup>1</sup>Mainly fresh citrus.<sup>3</sup>Some cooperatives export more than 1 of the commodities listed.<sup>2</sup>Three or fewer cooperatives.**Vegetables and Preparations**

**Values and Shares** Direct exports of vegetables and preparations from 10 cooperatives amounted to \$25 million in 1980 (table 10a). More than 70 percent of this amount is attributed to dry beans. The remaining \$6 million was made up mainly of other processed vegetable products. Indirect exports amounted to only about \$3 million from 4 of the 10 direct exporters.

Direct exports by vegetable cooperatives accounted for only 2.2 percent of total U.S. vegetable exports (table 10b). Exports of dry beans valued at \$18 million accounted for 4.8 percent of U.S. exports of that commodity, and all other direct cooperative vegetable exports accounted for only about 1 percent.

**Destinations** Europe was the largest market for cooperative vegetable exports at \$11 million (table 10c). The EEC imported the largest portion, \$10.5 million, mostly in dry beans.

**Table 9b—Fruits and preparations, cooperative share of U.S. exports, 1980**

| Commodity                   | U.S. exports | Direct cooperative exports | Cooperative share of U.S. exports |
|-----------------------------|--------------|----------------------------|-----------------------------------|
|                             | 1,000 dol.   | 1,000 dol.                 | Percent                           |
| Fresh citrus .....          | 378,469      | 193,165                    | 51.0                              |
| Processed citrus.....       | 162,664      | 17,071                     | 10.5                              |
| Other fresh fruit .....     | 360,200      | 48,270                     | 13.4                              |
| Other processed fruit ..... | 433,687      | 149,751                    | 34.5                              |
| Total .....                 | 1,335,020    | 408,257                    | 30.6                              |

**Table 9c—Fruits and preparations, direct exports by destination, 1980**

| Destination                       | Fresh citrus | Processed citrus | Other fresh fruit | Other processed fruit | Total   |
|-----------------------------------|--------------|------------------|-------------------|-----------------------|---------|
| 1,000 dollars                     |              |                  |                   |                       |         |
| Canada.....                       | 41,700       | 1,635            | 3,016             | 7,222                 | 53,573  |
| Latin America.....                | 50           | 1,706            | 6,906             | 8,832                 | 17,494  |
| Mexico .....                      | 0            | 0                | 534               | 0                     | 534     |
| Central America .....             | 0            | 1,200            | 593               | 200                   | 1,993   |
| Caribbean.....                    | 50           | 386              | 123               | 8,615                 | 9,174   |
| South America .....               | 0            | 120              | 5,656             | 17                    | 5,793   |
| Europe.....                       | 49,055       | 1,943            | 22,547            | 81,261                | 154,806 |
| EEC.....                          | 44,455       | 620              | 20,320            | 74,057                | 139,452 |
| Other W Europe .....              | 800          | 1,172            | 2,227             | 7,204                 | 11,403  |
| Eastern Europe <sup>1</sup> ..... | 3,800        | 151              | 0                 | 0                     | 3,951   |
| U.S.S.R.....                      | 0            | 0                | 0                 | 0                     | 0       |
| Asia.....                         | 102,200      | 11,536           | 15,618            | 15,071                | 144,425 |
| West Asia .....                   | 0            | 746              | 5,135             | 208                   | 6,089   |
| South Asia.....                   | 0            | 0                | 0                 | 0                     | 0       |
| SE & E Asia <sup>2</sup> .....    | 0            | 0                | 7,492             | 866                   | 8,358   |
| Japan .....                       | 102,200      | 10,790           | 2,991             | 13,997                | 129,978 |
| Africa.....                       | 0            | 1                | 0                 | 29                    | 30      |
| Oceania.....                      | 160          | 0                | 159               | 233                   | 552     |
| Unknown.....                      | 0            | 250              | 24                | 37,103                | 37,377  |
| Totals .....                      | 193,165      | 17,071           | 48,270            | 149,751               | 408,257 |

<sup>1</sup>Excluding U.S.S.R.<sup>2</sup>Excluding Japan.

**Table 10a—Vegetables and preparations, values of direct, indirect, and total exports by cooperatives, 1980**

| Commodity                               | Direct |            | Indirect |            | Total  |            |
|---|--------|------------|----------|------------|--------|------------|
|   | Co-ops | Value      | Co-ops   | Value      | Co-ops | Value      |
|   | No.    | 1,000 dol. | No.      | 1,000 dol. | No.    | 1,000 dol. |
| Dry beans and peas.....                 | 5      | 18,744     | 4        | 3,146      | 5      | 21,890     |
| All other vegetables <sup>1</sup> ..... | 5      | 6,914      | 0        | 0          | 5      | 6,914      |
| Total.....                              | 10     | 25,658     | 4        | 3,146      | 10     | 28,804     |

<sup>1</sup>Mostly processed.

**Table 10b—Vegetables and preparations, cooperative share of U.S. exports, 1980**

| Commodity                               | U.S. exports | Direct cooperative exports | Cooperative share of U.S. exports |
|---|--------------|----------------------------|-----------------------------------|
|   | 1,000 dol.   |                            | Percent                           |
| Dry beans and peas.....                 | 387,548      | 18,744                     | 4.8                               |
| All other vegetables <sup>1</sup> ..... | 730,265      | 6,914                      | 1.0                               |
| Total.....                              | 1,117,813    | 25,658                     | 2.2                               |

<sup>1</sup>Mostly processed.

**Table 10c—Vegetables and preparations, direct exports by destination, 1980**

| Destination               | Dry beans and peas | All other vegetables | Total  |
|---------------------------|--------------------|----------------------|--------|
|                           | 1,000 dollars      |                      |        |
| Canada.....               | 1,116              | 855                  | 1,971  |
| Latin America.....        | 6,582              | 1                    | 6,583  |
| Mexico.....               | 6,142              | 0                    | 6,142  |
| Central America.....      | 408                | 0                    | 408    |
| Caribbean.....            | 32                 | 0                    | 32     |
| South America.....        | 0                  | 1                    | 1      |
| Europe.....               | 8,546              | 2,609                | 11,155 |
| EEC.....                  | 8,400              | 2,127                | 10,527 |
| Other Western Europe..... | 0                  | 482                  | 482    |
| Eastern Europe.....       | 146                | 0                    | 146    |
| U.S.S.R.....              | 0                  | 0                    | 0      |
| Asia.....                 | 2,500              | 3,141                | 5,641  |
| West Asia.....            | 0                  | 131                  | 131    |
| South Asia.....           | 0                  | 0                    | 0      |
| SE & East Asia.....       | 0                  | 93                   | 93     |
| Japan.....                | 2,500              | 2,917                | 5,417  |
| Africa.....               | 0                  | 0                    | 0      |
| Oceania.....              | 0                  | 298                  | 298    |
| Unknown.....              | 0                  | 10                   | 10     |
| Total.....                | 18,744             | 6,914                | 25,658 |

Almost all of the \$5.6 million in sales to Asia went to Japan. This was divided fairly evenly between dry beans and all other vegetables.

Latin American destinations received \$6.5 million in vegetable products, \$6.1 million of which went to Mexico in the form of dry beans.

## Nuts and Preparations

**Values and Shares** Four cooperatives had direct nut exports of \$203 million, plus an additional \$6 million in indirect sales (table 11a).

Nut cooperatives were responsible for a 35-percent share of U.S. nut exports. Only four cooperatives were responsible for this relatively large share.

**Destinations** European destinations received nut exports valued at \$144 million, more than 70 percent of all direct nut sales by cooperatives, (table 11b). Again, EEC countries purchased the bulk of this, about \$116 million. Japan received \$25 million of the \$33 million in nuts exported to Asia.

Nut exports to Canada amounted to \$7.5 million. Latin American and African destinations had purchases of \$1.5 million each, while destinations in Oceania received \$2.4 million.

## Cotton

**Values and Shares** Direct exports of raw cotton from four cooperatives valued at \$514 million make cotton the third largest commodity export by cooperatives (table 12a). In addition, two of these associations had \$86 million in indirect sales, for total exports of \$601 million.

Direct sales of raw cotton accounted for 17.9 percent of total U.S. cotton exports.

**Destinations** The overwhelming majority of cotton sales, 86 percent, or \$446 million, were bound for various parts of Asia (table 12b). Nearly \$275 million, or 53 percent, went to Southeast and East Asia. Many of these

**Table 11a—Nuts and preparations<sup>1</sup>, values of direct, indirect, and total exports by cooperatives, 1980**

|                | Number of co-ops | 1,000 dol. |
|----------------|------------------|------------|
| Direct .....   | 4                | 203,150    |
| Indirect ..... | ( <sup>2</sup> ) | 6,462      |
| Total .....    | 4                | 209,612    |

<sup>1</sup>Excluding peanuts (see oilseeds, oilnuts, and products).

<sup>2</sup>Three or fewer cooperatives.

**Table 11b—Nuts and preparations<sup>1</sup>, direct exports by destination, 1980**

| Destination                | 1,000 dollars |
|----------------------------|---------------|
| Canada .....               | 7,578         |
| Latin America .....        | 1,588         |
| Mexico .....               | 676           |
| Central America .....      | 6             |
| Caribbean .....            | 12            |
| South America .....        | 894           |
| Europe .....               | 144,186       |
| EEC .....                  | 116,208       |
| Other Western Europe ..... | 26,988        |
| Eastern Europe .....       | 990           |
| U.S.S.R. ....              | 2,446         |
| Asia .....                 | 33,349        |
| West Asia .....            | 5,082         |
| South Asia .....           | 1,077         |
| SE & E Asia .....          | 1,432         |
| Japan .....                | 25,758        |
| Africa .....               | 1,548         |
| Oceania .....              | 2,414         |
| Unknown .....              | 10,041        |
| Total .....                | 203,150       |

<sup>1</sup>Excluding peanuts (see oilseeds, oilnuts, and preparations).

countries, once net exporters of raw cotton, now emphasize exports of manufactured textile products, hence their large imports of raw cotton. Japanese imports of cooperative cotton amounted to \$155 million.

European shipments totaled \$67 million and were spread fairly evenly among the EEC, Eastern Europe, and non-EEC nations of Western Europe.

**Table 12a—Cotton (raw)<sup>1</sup>, values of direct, indirect, and total exports by cooperatives, 1980**

|                | Number of co-ops | 1,000 dol. |
|----------------|------------------|------------|
| Direct .....   | 4                | 514,570    |
| Indirect ..... | ( <sup>2</sup> ) | 86,633     |
| Total .....    | 4                | 601,203    |

<sup>1</sup>Excluding linters.

<sup>2</sup>Fewer than 3 cooperatives.

**Table 12b—Cotton (raw)<sup>1</sup>, direct exports by destination, 1980**

| Destination                | 1,000 dollars |
|----------------------------|---------------|
| Canada .....               | 51            |
| Latin America .....        | 115           |
| Mexico .....               | 0             |
| Central America .....      | 0             |
| Caribbean .....            | 0             |
| South America .....        | 115           |
| Europe .....               | 67,361        |
| EEC .....                  | 23,230        |
| Other Western Europe ..... | 20,437        |
| Eastern Europe .....       | 23,694        |
| U.S.S.R. ....              | 0             |
| Asia .....                 | 446,968       |
| West Asia .....            | 15,450        |
| South Asia .....           | 1,268         |
| SE & E Asia .....          | 274,769       |
| Japan .....                | 155,481       |
| Africa .....               | 0             |
| Oceania .....              | 75            |
| Unknown .....              | 0             |
| Total .....                | 514,570       |

<sup>1</sup>Excluding linters.

## Other Commodities

**Values** Eight cooperatives were engaged in exporting specialty products including honey, wine, seed, and byproducts such as essential oils, citrus pulp, and beet pulp. Combined direct exports of these products amounted to \$31 million. Indirect exports came to only \$329,000 (table 13a).

Because of the number and diversity of

**Table 13a—Other commodities<sup>1</sup>, values of direct, indirect, and total exports by cooperatives, 1980**

|                | Number of co-ops | 1,000 dol. |
|----------------|------------------|------------|
| Direct .....   | 8                | 31,228     |
| Indirect ..... | ( <sup>2</sup> ) | 329        |
| Total .....    | 8                | 31,557     |

<sup>1</sup>Includes cotton linters, field and garden seed, honey, essential oils, citrus pulp, and beet pulp.

<sup>2</sup>Fewer than 3 cooperatives.

**Table 13b—Other commodities<sup>1</sup>, direct exports by destination, 1980**

| Destination                | 1,000 dollars |
|----------------------------|---------------|
| Canada .....               | 102           |
| Latin America .....        | 387           |
| Mexico .....               | 165           |
| Central America .....      | 0             |
| Caribbean .....            | 17            |
| South America .....        | 205           |
| Europe .....               | 7,280         |
| EEC .....                  | 6,355         |
| Other Western Europe ..... | 125           |
| Eastern Europe .....       | 800           |
| U.S.S.R. ....              | 0             |
| Asia .....                 | 12,074        |
| West Asia .....            | 237           |
| South Asia .....           | 0             |
| SE & E Asia .....          | 0             |
| Japan .....                | 11,837        |
| Africa .....               | 0             |
| Oceania .....              | 0             |
| Unknown .....              | 11,385        |
| Total .....                | 31,228        |

<sup>1</sup>Includes cotton linters, field and garden seed, honey, essential oils, citrus pulp, and beet pulp, and wine.

products included in this category, share of U.S. exports of these commodities cannot be measured accurately.

**Destinations** The largest dollar volume of other commodities, \$12 million, is attributed to Asian purchases (table 13b). European destinations, mainly the EEC, accounted for \$7 million, and destinations for a large volume, \$11 million, were not reported.

**Table 14—Values of direct exports and percentage of total direct exports, by commodity group, 1976 and 1980<sup>1</sup>**

| Commodity Group <sup>2</sup>                   | 1976            |            |                         | 1980            |            |                         |
|--|-----------------|------------|-------------------------|-----------------|------------|-------------------------|
|  | Co-ops          | Value      | Percent of total direct | Co-ops          | Value      | Percent of total direct |
|  | No.             | 1,000 dol. |                         | No.             | 1,000 dol. |                         |
| Animals and animal products <sup>3</sup> ..... | 14              | 34,175     | 2.0                     | 7               | 97,139     | 3.0                     |
| Grains and preparations.....                   | 17              | 941,642    | 46.0                    | 4               | 1,322,837  | 41.1                    |
| Oilseeds, oilnuts, products <sup>4</sup> ..... | 11              | 427,157    | 21.0                    | 9               | 617,614    | 19.2                    |
| Fruits and preparations.....                   | 27              | 292,704    | 14.0                    | 22              | 408,257    | 12.7                    |
| Vegetables and preparations.....               | 12              | 18,360     | 1.0                     | 10              | 25,658     | 1.0                     |
| Nuts and preparations.....                     | 3               | 79,479     | 4.0                     | 4               | 203,150    | 6.3                     |
| Cotton (raw) <sup>5</sup> .....                | 4               | 231,664    | 11.0                    | 4               | 514,570    | 16.0                    |
| Other commodities <sup>6</sup> .....           | 7               | 5,464      | 1.0                     | 8               | 31,228     | 1.0                     |
| Total.....                                     | <sup>7</sup> 73 | 2,030,645  | 100.0                   | <sup>7</sup> 63 | 3,220,453  | <sup>8</sup> 100.0      |

<sup>1</sup>Dollar volumes are unadjusted and therefore not directly comparable.

<sup>2</sup>Excluding tobacco.

<sup>3</sup>Excluding furskins.

<sup>6</sup>Includes cotton linters, honey, wine, field and garden seed, essential oils, citrus pulp, and beet pulp.

<sup>4</sup>Including peanuts.

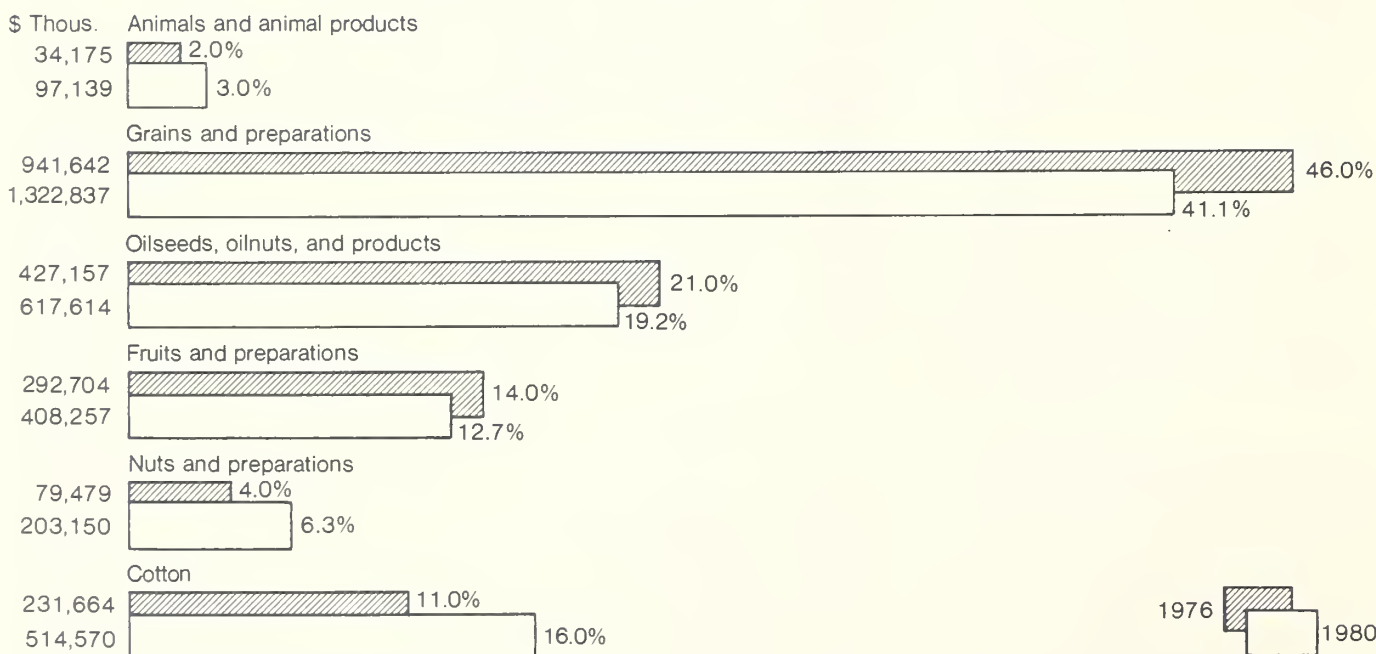
<sup>7</sup>Some cooperatives had exports from more than 1 commodity group.

<sup>5</sup>Excluding linters.

<sup>8</sup>Does not add due to rounding.

Figure 5

### Values of Direct Exports as Percentages of Total Direct Exports by Cooperatives, 1976 and 1980





## Changes in Cooperative Exports Since 1976<sup>3</sup>

Several changes have occurred in cooperative participation and performance in the export market. The number of cooperatives engaged in direct exporting declined from 73 in 1976 to 63 in 1980 (table 14). The biggest changes occurred in animals and animal products, which declined from 14 to 7 direct exporters, and fruits and preparations, which decreased by 5, to 22 cooperatives. Nuts and other commodities gained one exporter each. Changes in the relative importance of commodities in terms of percent of direct exports are shown in table 14 and fig. 5.

In 1976, 46 percent of the total dollar volume of direct exports by cooperatives was from grains. Oilseeds were the second most important commodity, with 21 percent of the total, followed by fruits and preparations with 14 percent, and cotton at 11 percent. Nuts and preparations accounted for 4 percent of the total; animal products, 2 percent; vegetables, 1 percent; and all other commodities, less than 1 percent.

In 1980, grains remained the largest commodity export but decreased to 41 percent of the value of direct exports. Oilseeds decreased to 19 percent. Cotton replaced fruits and preparations as the third most important export, increasing its share of total direct sales from 11 percent to 16 percent. Fruits remained relatively constant, about 13 percent. Nut exports accounted for 6 percent of cooperative direct exports in 1980, and animal products increased to 3 percent. Vegetables and other commodities remained about 1 percent each.

<sup>3</sup>ACS conducted the last survey of cooperative exports in 1976 which resulted in the report, *Agricultural Exports by Cooperatives*, by Donald E. Hirsch. While the format of the 1980 update is basically consistent with the 1976 study, it is not possible to make direct comparisons of dollar volumes unless adjustments for inflation are made. Changes in cooperative exports from 1976 to 1980 will be described using market shares and percentages for simplicity's sake. Share data do not require adjustment for inflation.

**Table 15—Cooperative export shares (direct) of U.S. agricultural exports, by commodity group, 1976, 1980**

| Commodity group <sup>1</sup>                   | 1976<br>Export share | 1980<br>Export share |
|--|----------------------|----------------------|
|  | <i>Percent</i>       |                      |
| Animals and animal products <sup>2</sup> ..... | 1.4                  | 2.9                  |
| Grains and preparations.....                   | 8.0                  | 7.0                  |
| Oilseeds, oilnuts, products <sup>3</sup> ..... | 8.4                  | 6.6                  |
| Fruits and preparations.....                   | 38.0                 | 30.6                 |
| Vegetables and Preparations.....               | 2.7                  | 2.2                  |
| Nuts and preparations <sup>4</sup> .....       | 40.1                 | 35.1                 |
| Cotton (raw) <sup>5</sup> .....                | 22.1                 | 17.9                 |
| Other commodities <sup>6</sup> .....           | 1.0                  | 1.0                  |
| Total.....                                     | 9.2                  | 7.8                  |

<sup>1</sup>Excluding tobacco.

<sup>2</sup>Excluding furskins.

<sup>3</sup>Including peanuts.

<sup>4</sup>Excluding peanuts.

<sup>5</sup>Excluding linters.

<sup>6</sup>Includes cotton linters, honey, field and garden seed, essential oils, citrus pulp, beet pulp, and wine.

**Shares** Direct exports by cooperatives accounted for 7.8 percent of all U.S. agricultural exports in 1980, down from 9.2 percent in 1976 (table 15 and fig. 6). Every commodity group, except animals and animal products, experienced a decrease in share of U.S. exports despite increases in actual dollar volume. These decreases resulted because U.S. exports (by commodity and as a whole) increased faster than cooperative exports.

Cooperatives maintained healthy shares of U.S. exports for several commodity groups. Exports of nuts and preparations by cooperatives represented 35 percent of U.S. nut exports in 1980, down from 40 percent in 1976.

Direct fruit exports from cooperatives dropped from 38 percent of U.S. fruit shipments in 1976 to 30 percent in 1980.

In 1980, 17.9 percent of all U.S. cotton exports were attributed to cooperatives, a decrease from 22 percent in 1976.

Direct grain sales by cooperatives accounted for 7 percent of U.S. grain sales in 1980, down from 8 percent. Oilseeds dropped from 8.4 percent to 6.6 percent.

Cooperative animal and animal product exporters increased their share of U.S. animal exports from 1.4 percent to 2.9 percent.

Cooperative share of vegetable exports decreased from 2.7 percent to 2.2 percent.

**Destinations** Changes in the relative importance of foreign markets for cooperative exports can be compared by noting the percent of total exports direct exporters shipped to each destination each year (table 16 and fig. 7).

In 1976, the largest markets for cooperative exports were Europe and Asia, each accounting for about 30 percent of the value of total exports. Within these regions, EEC countries claimed 27 percent of the total, while Southeast and East Asia accounted for 25 percent. In 1980, however, the European share of co-op exports decreased to 29 percent, and the Asian share increased substantially, to 42.2 percent.

Looking more closely at these regions, note the share of cooperative exports going to EEC countries declined from 27 percent in 1976 to 14.5 percent in 1980. The share to other Western European countries increased from 2

Figure 6

## Cooperative Shares of U.S. Agricultural Exports, 1976 and 1980

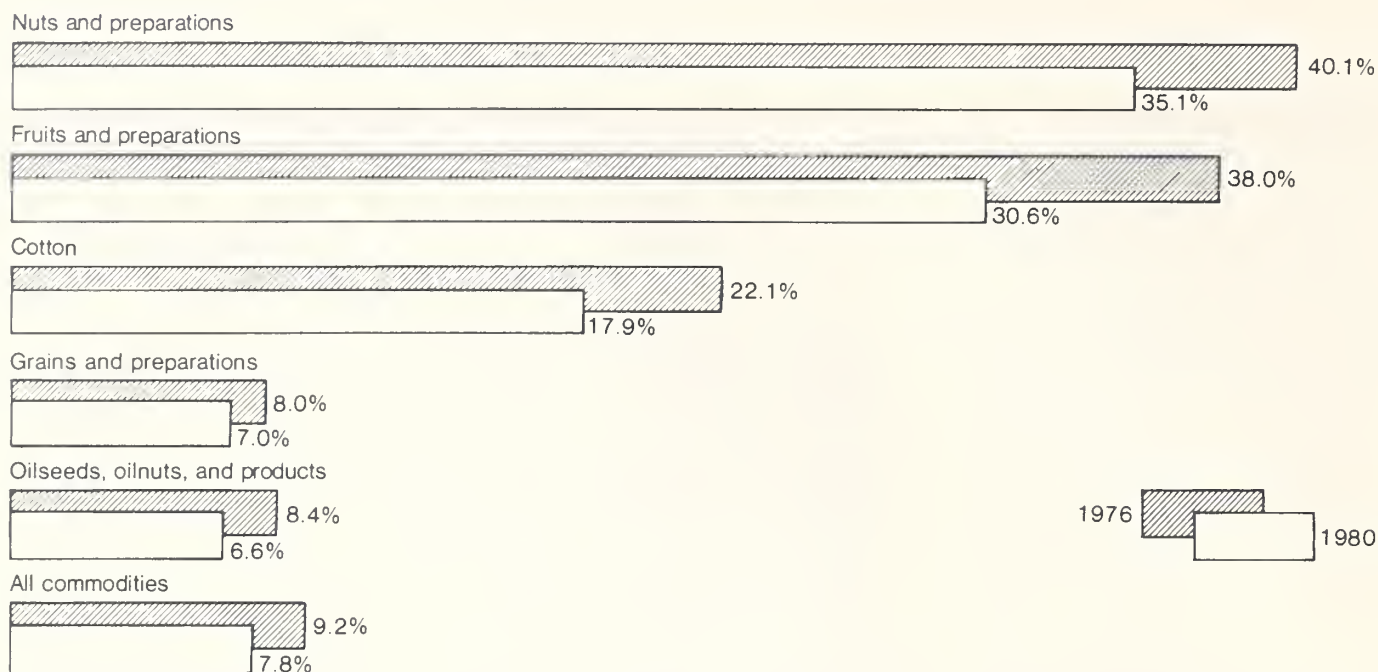
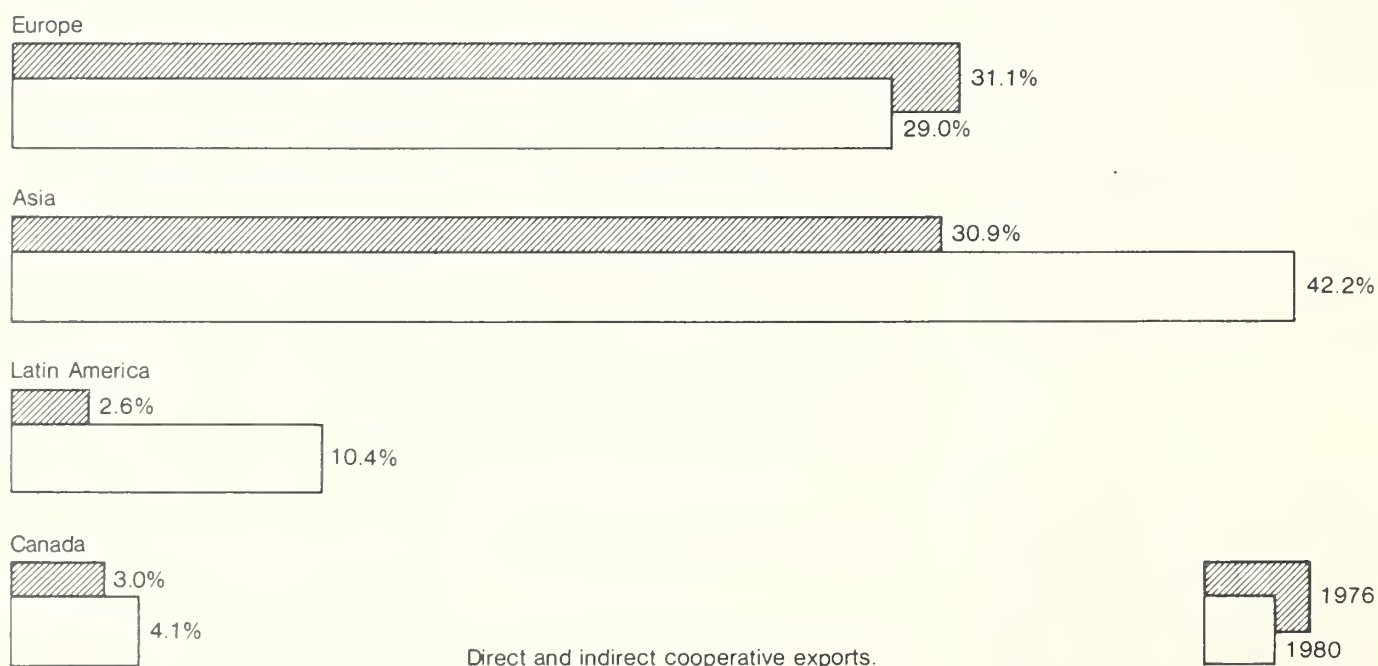


Figure 7

## Percent of Total Cooperative Exports by Destination, 1976 and 1980



**Table 16—Cooperative exports by destination and percent of total cooperative exports, 1976 and 1980<sup>1</sup>**

| Destination                       | 1976       |                        | 1980       |                        |
|-----------------------------------|------------|------------------------|------------|------------------------|
|                                   | Value      | Share of total exports | Value      | Share of total exports |
|                                   | 1,000 dol. | Percent                | 1,000 dol. | Percent                |
| Canada .....                      | 98,802     | 3.0                    | 298,423    | 4.1                    |
| Latin America .....               | 87,179     | 2.6                    | 655,970    | 10.4                   |
| Mexico .....                      | 14,388     | 0.5                    | 92,237     | 1.4                    |
| Central America .....             | 3,262      | 0.5                    | 5,932      | 0.5                    |
| Caribbean .....                   | 4,844      | 0.5                    | 12,757     | 0.5                    |
| South America .....               | 64,685     | 1.9                    | 545,044    | 8.6                    |
| Europe .....                      | 1,034,832  | 31.1                   | 1,833,697  | 29.0                   |
| EEC .....                         | 897,522    | 27.0                   | 917,579    | 14.5                   |
| Other W. Europe .....             | 65,669     | 2.0                    | 354,690    | 5.6                    |
| Eastern Europe <sup>2</sup> ..... | 71,641     | 2.2                    | 561,248    | 8.9                    |
| Asia .....                        | 1,026,542  | 30.9                   | 2,672,512  | 42.2                   |
| West Asia .....                   | 81,040     | 2.4                    | 382,420    | 6.2                    |
| South Asia .....                  | 102,285    | 3.1                    | 81,227     | 1.3                    |
| SE & E Asia <sup>3</sup> .....    | 843,217    | 25.4                   | 2,208,865  | 34.9                   |
| Africa .....                      | 34,401     | 1.0                    | 113,623    | 1.9                    |
| Oceania .....                     | 6,471      | 0.5                    | 4,989      | 0.5                    |
| Unknown .....                     | 1,034,721  | 31.1                   | 787,519    | 12.4                   |
| Total .....                       | 3,322,948  | 100.0                  | 6,366,733  | 100.0 <sup>4</sup>     |

<sup>1</sup>Includes direct and indirect exports by cooperatives. Direct export values by destination for 1976 are not available.

<sup>2</sup>Including U.S.S.R.

<sup>3</sup>Including Japan.

<sup>4</sup>Does not add due to rounding.

**Table 17—Destinations receiving largest volumes (\$) by commodity groups, 1976, 1980**

| Commodity group <sup>1</sup>                   | 1976        | 1980        |
|--|-------------|-------------|
| Animals and animal products <sup>2</sup> ..... | EEC         | Canada      |
| Grains and preparations .....                  | EEC         | Japan       |
| Oilseeds, oilnuts, products <sup>3</sup> ..... | EEC         | EEC         |
| Fruits and preparations .....                  | SE & E Asia | EEC         |
| Vegetables and preparations .....              | EEC         | EEC         |
| Nuts and preparations <sup>4</sup> .....       | EEC         | EEC         |
| Cotton (raw) <sup>5</sup> .....                | SE & E Asia | SE & E Asia |
| Other Commodities <sup>6</sup> .....           | —           | Japan       |

<sup>1</sup>Excluding tobacco.

<sup>2</sup>Excluding furskins.

<sup>3</sup>Including peanuts.

<sup>4</sup>Excluding peanuts.

<sup>5</sup>Excluding linter.

<sup>6</sup>Includes cotton linters, honey, field and garden seed, essential oils, citrus pulp, and beet pulp.

percent to 5.6 percent. Eastern European countries, including the Soviet Union, purchased 8.9 percent of cooperative exports in 1980, up from 2.2 percent in 1976.

Cooperative exports to Southeast and East Asia (including Japan) increased from 25 percent of the total in 1976 to about 35 percent in 1980. West Asian destinations increased their share from 2.4 percent in 1976 to 6.2 percent in 1980. The share of cooperative exports bound for South Asia decreased from 3.1 to 1.3 percent.

Latin American nations purchased 10.4 percent of shipments by direct cooperative exporters in 1980, up from 2.6 percent in 1976. This overall increase is due primarily to the large increase in the share of exports to South America.

Note that the destinations for 31 percent of exports by direct exporting cooperatives were not reported in 1976. The result is an understatement of shares to known destinations in 1976.

There were several changes with respect to the most important destinations for exports from each commodity group, (table 17):

- EEC declined somewhat in importance as a market for cooperative exports in 1980.
- Canada replaced the EEC as the destination receiving the largest dollar volume of animals and animal products.
- Japan became the largest importer of cooperative grains in 1980, replacing the EEC.
- The EEC remained the largest importer of cooperative oilseeds, vegetables, and nuts and surpassed Southeast Asia as the most important market for co-op fruits and fruit products.
- Southeast Asia remains the largest importer of raw cotton from cooperatives.

In addition to number of cooperative direct exporters, dollar volumes of



direct exports, and shares of U.S. exports, it is possible to measure the extent of cooperative involvement in direct exporting by comparing the percentage of total export sales direct exporters made either directly or indirectly (table 18, fig. 8).

In 1976, 61 percent of total exports were direct sales. Direct sales as a percentage of total exports ranged from 51.6 percent for grains and preparations to 97.5 percent for nuts and preparations.

In 1980, some interesting changes can be seen. Direct exports decreased to 50.3 percent of total exports. In other words, cooperatives exported almost as much indirectly as directly. Significant changes in grains and oilseeds appear to be responsible for this overall change. Direct exporting cooperatives made only 36 percent of their total grain sales directly, a significant decline from 51 percent in 1976. Indirect sales increased correspondingly to 63 percent. In addition, direct exports of oilseeds decreased from 58 percent of

total sales in 1976 to 45 percent in 1980, with an increase in indirect exports to 54.5 percent.

Smaller decreases in the percentage of total exports made directly occurred in nuts and cotton. Animal product cooperatives increased direct exports from 69 percent of total sales in 1976 to 87.4 percent in 1980.

Thus, overall, cooperatives are exporting a smaller percentage of total sales directly. Grain and oilseed cooperatives show the most significant shift away from direct selling.

## CONCLUSIONS

### Direct Exporting

Commodities from many cooperatives eventually find their way to the export market through any number of intermediaries, but in 1980, only 63 cooperatives sold directly to foreign buyers. These cooperatives had total

direct sales of \$3.22 billion, with an additional \$3.1 billion in indirect sales.

Grains and oilseeds remain the most important commodities in terms of dollar values of direct sales. Grains and oilseeds combined represented more than 60 percent of total direct sales by cooperatives. Cotton and fruits followed with 16 percent and 12 percent, respectively.

### Shares

Though actual dollar volumes of direct sales increased significantly from 1976 to 1980, cooperative share of U.S. exports is shown to have decreased from 9.2 percent to 7.8 percent, because U.S. exports increased at a faster rate than cooperative exports. Adjustments for inflation must be made for direct comparison of dollar volumes.

The largest cooperative shares of U.S. exports were nuts with 35 percent, fruits with 30 percent, and cotton at 17 percent.

**Table 18—Direct and indirect exports as percentages of total exports by direct exporting cooperatives, 1976 and 1980**

| Commodity Group                          | Direct Exports,<br>1976 | Indirect Exports | Direct Exports,<br>1980 | Indirect Exports |
|--|-------------------------|------------------|-------------------------|------------------|
| <i>Percent of total</i>                  |                         |                  |                         |                  |
| Animals & animal products .....          | 69.0                    | 31.0             | 87.4                    | 12.6             |
| Grains & preparations.....               | 51.6                    | 48.4             | 36.7                    | 63.3             |
| Oilseeds, oilnuts, and preparations..... | 58.2                    | 41.8             | 45.5                    | 54.5             |
| Fruits & preparations .....              | 85.6                    | 14.4             | 96.3                    | 3.7              |
| Vegetables & preparations.....           | 80.8                    | 19.2             | 89.1                    | 10.9             |
| Nuts & preparations .....                | 97.5                    | 2.5              | 96.9                    | 3.1              |
| Cotton .....                             | 88.1                    | 11.9             | 85.6                    | 14.4             |
| Other commodities                        |                         |                  |                         |                  |
| Totals.....                              | 61.1                    | 38.9             | 50.3                    | 49.7             |

## Foreign Markets

Asia was the largest regional market for direct cooperative exports at \$1.57 billion, followed by Europe at \$882 million, and Canada at \$215 million.

In terms of individual commodities, EEC countries are still the largest market for oilseeds, vegetables, and nuts and surpassed Southeast Asia as the largest market for cooperative fruits.

Japan replaced EEC as the largest importer of direct cooperative grains and is the largest importer of "other commodities" as well.

Southeast Asian countries buy the largest quantities of cooperative cotton, and Canada replaced EEC as the leading market for animals and animal products.

In comparing direct and indirect sales

as percentages of total exports for 1976 and 1980, apparently, overall, cooperatives are selling smaller proportions of their exports directly. The decrease from 61 percent in 1976 to 50 percent in 1980 appears to be tied to a significant decline in percentage of grains and oilseeds sold directly.

No attempt has been made to determine the reasons for these and other changes in cooperative participation and performance in the export market. In addition, it will be necessary to update this data regularly to determine if the changes indicated in this report develop into trends. Clearly, however, cooperatives must continue to be aggressive in developing export marketing expertise and producer commitment, if they are to maintain and strengthen their position, collectively and individually in the international market.

## References

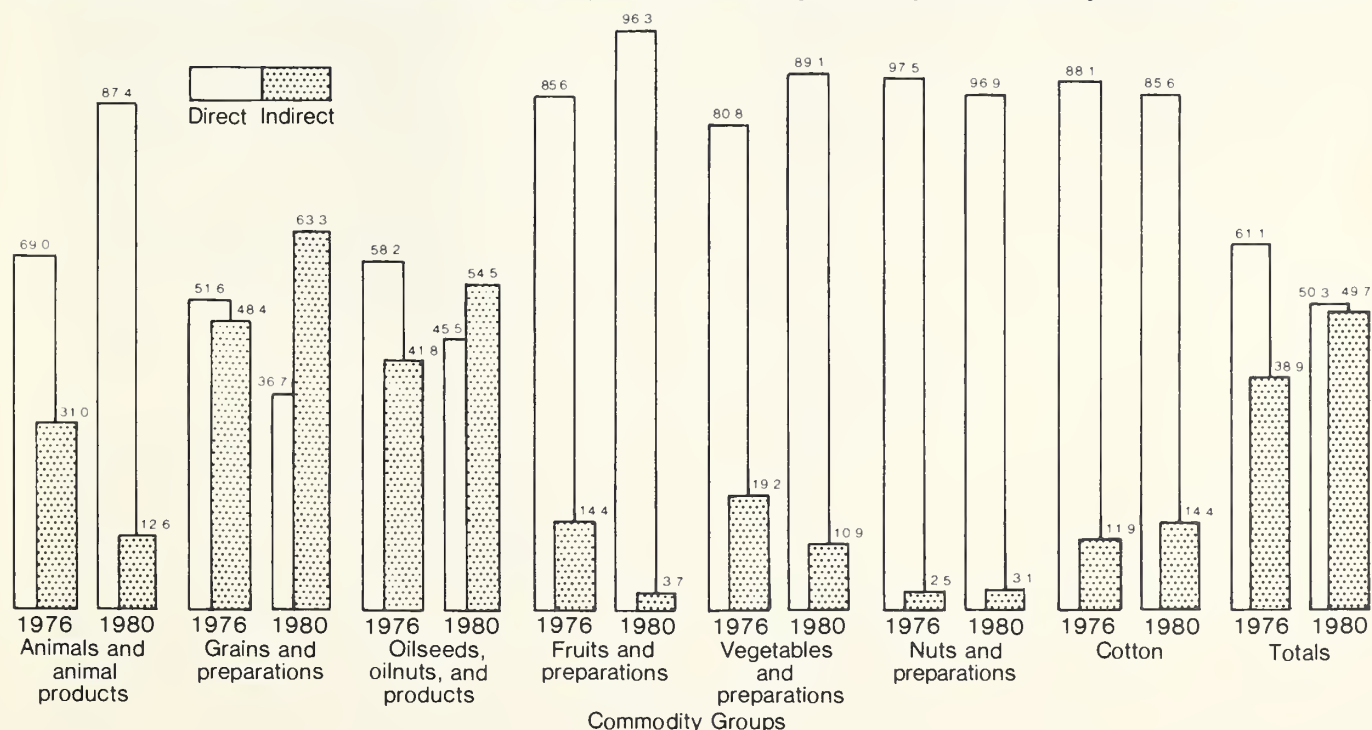
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Figure 8

## Direct and Indirect Exports as Percentages of Total Exports, by Commodity, 1976 and 1980



# Appendices

## Appendix A - Methodology

Data for this report was gathered through a one-page mail questionnaire similar to the successful one used in the 1976 survey. The initial mailing was followed by two mail followups and one telephone followup to reach non-respondents.

Because the sample universe of direct exporting cooperatives is relatively small, an attempt was made to identify and include it entirely. This was a relatively easy task, as most direct exporters are known to Agricultural Cooperative Service. Sources used in compiling the list of direct exporters included exporters identified in the 1976 survey as well as a group of exporters newly identified by ACS commodity specialists. The final list of 85 cooperatives was thought to represent close to 100 percent of the sample universe of direct exporting cooperatives. Fourteen of these cooperatives were later discovered to be indirect exporters only for 1980. Eight cooperatives did not respond but probably had direct exports in calendar year 1980, and direct sales for two cooperatives were estimated from secondary sources.

Cooperatives were asked to provide dollar volumes of direct exports by commodity group and destination for calendar year 1980. They also were asked to report any indirect sales, if they had some direct exports as well.

Though the survey was authorized by law, participation was voluntary. Respondents were assured that the information provided would be treated confidentially.

Appendix table 1—Destinations of exports by cooperatives, by country groupings

|                                  |   |  |                                       |
|----------------------------------|---|--|---------------------------------------|
| <b>Canada</b>                    | <b>Other Western Europe</b>                     | <b>Southeast and East Asia<br/>excluding Japan</b> | Niger                                 |
| <b>Latin America</b>             | Iceland   |  | Togo                                  |
| <b>Mexico</b>                    | Norway  | Laos   | Nigeria                               |
| <b>Central America</b>           | Finland   | Cambodia   | Central African Empire                |
| Guatemala                        | Austria   | Malaysia   | Gabon                                 |
| Belize                           | Switzerland                                     | Singapore  | Chad                                  |
| El Salvador                      | Azores  | Indonesia  | St. Helena                            |
| Honduras                         | Spain   | Brunei   | Madeira Islands                       |
| Nicaragua                        | Portugal  | Philippines  | Upper Volta                           |
| Costa Rica                       | Gibraltar                                       | Macao  | Benin (Dahomey)                       |
| Panama                           | Greece  | Southern Asia, n.e.c.                              | Angola                                |
|                                  | Malta and Gozo                                  | Mongolia Korea,                                    | Congo (Brazzaville)                   |
|                                  |   | Rep of North Korea                                 | Liberia                               |
| <b>Caribbean</b>                 | <b>Eastern Europe,<br/>(excluding U.S.S.R.)</b> | Hong Kong  | Zaire                                 |
| Bermuda                          | German Democratic Rep.                          | China, Mainland                                    | Burundi                               |
| Bahamas                          | Czechoslovakia                                  | China, Taiwan                                      | Rwanda                                |
| Cuba                             | Hungary   | Burma  | Somalia                               |
| Jamaica                          | Poland  | Thailand   | Swaziland                             |
| Turks and Caicos Islands         | Yugoslavia                                      | Vietnam  | Rhodesia                              |
| Cayman Islands                   | Albania   |  | Malawi                                |
| Haiti                            | Romania   | <b>Japan</b>                                       | Lesotho                               |
| Dominican Republic               | Bulgaria  | <b>Oceania</b>                                     | Ethiopia                              |
| Leeward and Windward<br>Islands  | <b>USSR</b>                                     | Australia  | Djibouti                              |
| Barbados                         | <b>Asia</b>                                     | New Zealand  | Uganda                                |
| Trinidad and Tobago              | <b>West Asia</b>                                | Papua New Guinea                                   | Kenya                                 |
| Netherlands Antilles             | Turkey  | Western Samoa                                      | Seychelles                            |
| French West Indies               | Cyprus  | British Pacific Islands                            | British Indian<br>Ocean Territory     |
|                                  | Syria   | French Pacific Islands                             | Tanzania                              |
| <b>South America</b>             | Lebanon   | Trust Territory of the<br>Pacific Islands          | Mauritius                             |
| Colombia                         | Iraq  | Pacific Islands, n.e.c.                            | Mozambique                            |
| Venezuela                        | Iran  |  | Malagasy Republic                     |
| Guyana                           | Israel  | <b>Africa</b>                                      | Comoros                               |
| Surinam                          | Jordan  | <b>North Africa</b>                                | French Indian Ocean                   |
| French Guiana                    | Gaza Strip                                      | Morocco  | Republic of South Africa<br>(Namibia) |
| Ecuador                          | Kuwait  | Algeria  |                                       |
| Peru                             | Saudi Arabia                                    | Tunisia  |                                       |
| Bolivia                          | Qatar   | Libya  |                                       |
| Chile                            | United Arab Emirates                            | Egypt  |                                       |
| Brazil                           | Yemen (Sana)                                    | <b>Other Africa</b>                                |                                       |
| Paraguay                         | Yemen (Aden)                                    | Sudan  |                                       |
| Uruguay                          | Oman  | Canary Islands                                     |                                       |
| Argentina                        | Bahrain   | Spanish Africa, n.e.c.                             |                                       |
| <b>Europe</b>                    | <b>South Asia</b>                               | Western Sahara                                     |                                       |
| <b>European Community (EC-9)</b> | Afghanistan                                     | Equatorial Guinea                                  |                                       |
| Netherland                       | India   | Mauritania   |                                       |
| Belgium and Luxembourg           | Pakistan  | Cameroon   |                                       |
| France                           | Bangladesh                                      | Senegal  |                                       |
| Germany, Fed. Rep.               | Sri Lanka (Ceylon)                              | Mali   |                                       |
| Italy                            |   | Guinea   |                                       |
| Denmark                          |   | Sierra Leone                                       |                                       |
| United Kingdom                   |   | Ivory Coast  |                                       |
| Ireland                          |   | Ghana  |                                       |
|                                  |   | The Gambia   |                                       |



**U.S. Department of Agriculture  
Agricultural Cooperative Service**

Agricultural Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents obtain supplies and services at lower costs and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The agency publishes research and educational materials, and issues *Farmer Cooperatives*. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.